

	Type	L #	Hits	Search Text	DBs	Time Stamp
1	BRS	L1	1079	(magnetic adj3 particles) same (silica or alumina or hydrosilsesquioxane)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/04/04 16:54
2	BRS	L2	71	1 and (superparamagnetic)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/04/04 16:55
3	BRS	L3	7	2 and dielectric	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/04/04 16:56
4	BRS	L4	4349	matrix same (polyimide or PMMA or (methyl adj silsesquioxane))	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/04/04 16:57
5	BRS	L5	345	4 same dielectric	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/04/04 16:57

	Type	L #	Hits	Search Text	DBs	Time Stamp
6	BRS	L6	24105	"fe.sub.2o.sub.3" or (chromium adj oxide) or "cro.sub.2" or (europium adj oxide) or "euo" or Nizn-ferrite or mnzn-ferrite or (yttrium-iron adj garnet)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/04/04 17:01
7	BRS	L7	385	6 same (indium)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/04/04 17:02
8	BRS	L8	6	4 and 7	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/04/04 17:06
9	BRS	L9	78	(magnetic adj3 particles) same (polyimide or (polymethyl adj methcrylate) or (methyl adj silsesquioxane))	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/04/04 17:17
10	BRS	L10	4	9 and indium	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/04/04 17:18

	Type	L #	Hits	Search Text	DBs	Time Stamp
11	BRS	L11	1	(diamagnetic adj3 particles) same (indium)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/04/04 17:23
12	BRS	L12	18	(diamagnetic) same (indium)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/04/04 17:25
13	BRS	L13	64	(diamagnetic) same (superparamagnetic)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/04/04 17:25
14	IS&R	L14	920	(438/3).CCLS.	USPAT; US-PGP UB	2003/04/04 17:33
15	IS&R	L17	90	(438/651).CCLS.	USPAT; US-PGP UB	2003/04/04 17:33
16	IS&R	L18	631	(438/778).CCLS.	USPAT; US-PGP UB	2003/04/04 17:33
17	IS&R	L19	529	(438/780).CCLS.	USPAT; US-PGP UB	2003/04/04 17:33
18	IS&R	L21	736	(438/618).CCLS.	USPAT; US-PGP UB	2003/04/04 18:22

L Number	Hits	Search Text	DB	Time stamp
1	11675	"magnetic particles"	USPAT; US-PGPUB	2003/03/31 19:57
2	1473	"low-k"	USPAT; US-PGPUB	2003/03/31 19:57
3	0	"magnetic particles" with "low-k"	USPAT; US-PGPUB	2003/03/31 19:57
4	0	"magnetic particles" same "low-k"	USPAT; US-PGPUB	2003/03/31 19:57
5	412896	magnetic	USPAT; US-PGPUB	2003/03/31 19:57
6	8	"low-k" with magnetic	USPAT; US-PGPUB	2003/03/31 19:58
7	170514	dielectric	USPAT; US-PGPUB	2003/03/31 19:59
8	5856	magnetic with dielectric	USPAT; US-PGPUB	2003/03/31 19:59
9	3040	ild	USPAT; US-PGPUB	2003/03/31 19:59
10	35	(magnetic with dielectric) and ild	USPAT; US-PGPUB	2003/03/31 19:59

438 / 3, 618 - 651

438 / 778, 780 w/ magnetic

784, w/ (ild

- gamma.

257 / 643, 645

- gamma.

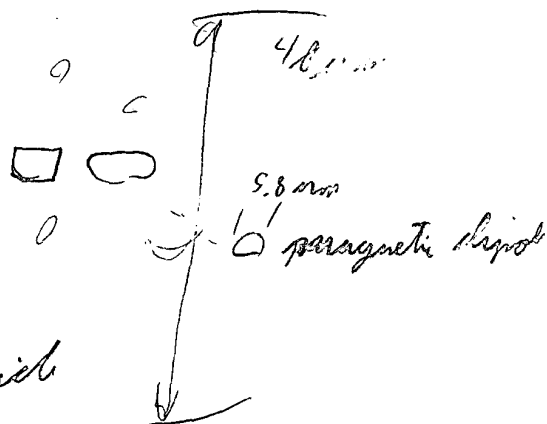
"Fe. sub. 2. O. sub. 3"

"Fe. sub. 2. O. sub. 3"

Fe ? O?

Fe near 0

iron oxide or iron dioxide



	Type	L #	Hits	Search Text	DBs	Time Stamp
1	BRS	L1	37034	("fe.sub.2o.sub.3") or ("fe?o?") or (fe near2 o) or (chromium adj oxide) or ("cro.sub.2") or (europium adj oxide) or "euo" or "nizn and ferrite" or (yttrium adj iron adj garnet)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/04/04 14:33
2	BRS	L2	513923	silica or alumina or hydrosilsequioxane	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/04/04 14:34
3	BRS	L3	13941	1 and 2	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/04/04 14:34
4	BRS	L4	115068	(polyimide or PMMA or (methy adj silsesquioxane))	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/04/04 14:35
5	BRS	L5	27895	magnetic adj3 particles	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/04/04 14:38

	Type	L #	Hits	Search Text	DBs	Time Stamp
6	BRS	L6	288	5 same (dimension)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/04/04 14:38
7	BRS	L7	5	6 same dielectric	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/04/04 14:38
8	BRS	L8	20	(magnetic with dielectric) and ild	USPAT	2003/04/04 14:53
9	BRS	L9	37	(magnetic with dielectric) and ild	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/04/04 14:58
10	BRS	L10	13941	1 and 2 and 3	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/04/04 14:58
11	BRS	L11	1	9 and 10	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/04/04 14:58

	Type	L #	Hits	Search Text	DBs	Time Stamp
12	BRS	L12	1155	10 and 4	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/04/04 14:59
13	BRS	L13	1149	12 and (indium or In)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/04/04 14:59
14	BRS	L14	250	13 and dielectric	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/04/04 14:59
15	BRS	L15	60	14 and (magnetic adj3 particles)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/04/04 15:00

Co, Ni, and Zn for chromium dioxide. Surface-treatments of the magnetic particle can be used to aid in chemical stability or to improve dispersibility as is commonly practiced in conventional magnetic recording. Additionally, magnetic oxide particles may contain a thicker layer of a lower refractive index oxide or other material having a low optical scattering cross-section as taught in U.S. Pat. Nos. 5,217,804 and 5,252,441. Cobalt surface-treated .gamma.-iron oxide is a preferred magnetic particle. Ferromagnetic particles of this type are available commercially, for example, from Toda Kogyo Corp. under the tradenames CSF 4085V2, CSF 4565V, CSF 4585V, and CND 865V, and also from ISK Magnetics, Inc. under the tradenames RPX4392, RPX-5003, RPX-5026, and RPX-5012.



DOCUMENT-IDENTIFIER: US 20020142241 A1

TITLE: Microencapsulated  
electrophotographic toner particles  
having colored shells

----- KWIC -----

[0048] The magnetic particles used in the toner microcapsules of this invention may be incorporated in the core material and/or into the shell material. By way of example only, particles of ferromagnetic elements such as iron, cobalt, nickel or manganese and alloys or compounds containing these elements such as magnetite (e.g., mapico black), ferrite, etc., may be employed. Preferably, these magnetic particles will include iron oxide compounds, such as cubic iron oxide, acicular iron oxide, gamma-Fe.sub.2O.sub.3, and mixed crystals of gamma-Fe.sub.2O.sub.3 and Fe.sub.3O.sub.4. Such particles also may be coated with cobalt, barium ferrite, iron carbide, pure iron, and ferromagnetic alloy powders such as Fe--Co and Fe--Co--Ni alloys. The size of such magnetically active particles will preferably range from about 0.1 microns to about 1.0 micron. Sizes ranging from about 0.1 to about 0.5 microns are somewhat preferred. These magnetically active particles are occluded in the shell material. The content of the magnetic particles may be 10 to 50 parts per 100 parts by weight with respect to a dry microcapsule.

DOCUMENT-IDENTIFIER: US 20020038582 A1

TITLE: COMPOSITES OF POWDERED FILLERS AND  
POLYMER MATRIX

----- KWIC -----

[0036] Composite materials of the invention can be made by mixing together the required portion by weight, or by volume, of particles of the chosen non-polar, nonfunctionalized polymer material of sufficiently small dimension, or equivalent spherical dimension, e.g. in the range 0.1 to 50 micrometers, with the corresponding portion by weight or by volume of the chosen filler material, again of sufficiently small dimension, or equivalent spherical dimension, e.g. in the range 0.1 to 50 micrometers, and subjecting the mixture to a temperature sufficient to melt the polymer material, e.g. in the range 280-400.degree. C. and to a pressure, e.g. in the range 3.5 to 1,380 MPa (500 to 200,000 psi), preferably 70 to 1,380 MPa (10,000 to 200,00 psi), sufficient to disperse the melted polymer material into the interstices between the particles of filler material. By equivalent spherical diameter is meant the diameter of a completely spherical particle having the same volume as the specified particle. In alternative processes which are described in more detail below the polymer may be added in the form of a solution thereof, provided steps are taken to remove all of the solvent once the filler and polymer materials have been uniformly mixed together. The polymer material preferably is selected from the group comprising polyarylene ether-2, polyarylene ether-3, and polyarylene ether-4, which

materials are described in more detail below, while the filler material is selected from the group comprising particles of inorganic material, particles of electromagnetic material, particles of a core of inorganic material covered with a layer of a metal oxide material, particles of metal material particles of magnetic material, and particles of low dielectric constant high melting point polymer material, all of which particles may be hollow.

US-PAT-NO: 6469605

DOCUMENT-IDENTIFIER: US 6469605 B2

TITLE: Methods for altering the magnetic  
properties of materials and the materials produced  
by these methods

----- KWIC -----

A material's magnetic properties pertain generally to how the material behaves when exposed to magnetic fields. There are several commonly recognized types of magnetic material including diamagnetic, paramagnetic, ferromagnetic, antiferromagnetic, ferrimagnetic, and superparamagnetic. The main characteristics of each type are overviewed in Engineering Electromagnetics (Hayt, Jr., William H., pg 306-310) and are described below for the three most common types.

US-PAT-NO: 5699842

DOCUMENT-IDENTIFIER: US 5699842 A

TITLE: Magnetic filling and mixing  
apparatus and processes  
thereof

----- KWIC -----

The magnetic fill material can have magnetic properties selected from magnetic, paramagnetic, superparamagnetic, diamagnetic particles, and the like materials, and mixtures thereof. The magnetic material can have a volume average particle size of from about 20 to about 10,000 microns, and in embodiments, preferably in the range of from about 30 to about 1,000 microns.

US-PAT-NO: 5582172

DOCUMENT-IDENTIFIER: US 5582172 A

TITLE: System of drug delivery to the  
lymphatic tissues

----- KWIC -----

36. A composition of claim 28, wherein said diamagnetic  
particle comprises  
indium.

US-PAT-NO: 4734708

DOCUMENT-IDENTIFIER: US 4734708 A

TITLE: Magnetic recording medium and  
magnetic recording method

----- KWIC -----

In this example, the demagnetizing heating roll was that shown in FIG. 3.  
That is, a magnetic layer 9 prepared by dispersing  $\gamma$ -Fe<sub>2</sub>O<sub>3</sub> magnetic particles in thermally stable polymer (polyarylate) was coated on a polyimide film (not shown), which was bonded to the silicon resin layer 11 with silicon primer. The core 12 was made of aluminum. A quartz lamp 13 was arranged at the center of the roll. The magnetic layer 9 was uniform in the longitudinal direction of the roll (in the direction perpendicular to the surface of the drawing). A sinusoidal magnetization having a wavelength of 10  $\mu$ m was provided in the direction C of rotation of the roll.